HEAD AND NECK.

The After-Treatment of Tongue-Excisions. By HENRY T. BUTLIN, F.R.C.S. (London). The after-treatment of operations on the tongue should be chiefly directed to: (1) maintaining the wound in the mouth as aseptic as possible; (2) diminishing the tendency of the wound-discharges to pass down the air-passages; (3) preventing food from passing down the trachea into the lungs.

The first indication is best fulfilled by the frequent use of powdered iodoform to the mouth wound. As soon as the operation is over, and before the patient is put back to bed, the surface of the fresh wound is dusted with powdered iodoform. And, for a week or ten days, iodoform is blown on to the surface of the wound by means of a proper insufflator. In addition, the patient may use a mouth-wash of Condy's fluid or weak carbolic solution to help to cleanse the interior of the mouth of the fluids which collect there.

The second indication requires that the patient's head should be kept low, and that he should lie on one side. Butlin only allows one small pillow, and insists that he should lie well over on the side from which the greatest amount of tongue has been removed. The discharges then have a tendency to sink into the cheek, and are frequently washed out or allowed to run out, and there is thus the least possible inclination of discharges to sink down towards the back of the mouth and larynx.

The feeding of these patients needs very great attention. When only half of the tongue—whether a lateral half or the front half—or two-thirds has been removed, liquids can generally easily be taken on the day following the operation from a feeder with a spout, provided a piece of India-rubber tubing, three or four inches long, be fixed on to the spout. If the right half of the tongue has been removed, the patient should lie over on the left side during feeding, so that the food is kept as far as possible away from the wound, and passes over the parts which have been least interfered with.

When the whole of the tongue has been removed, the difficulty of swallowing is much greater, and many days may elapse before the

patient acquires the knack of swallowing liquids without permitting a small quantity to pass down the air-tubes. During the first forty-eight hours these patients are fed through the rectum with nutrient enemata. At the end of that period the patient may make a first attempt to swallow a little liquid, and water should be chosen for the experiment, because the entrance of a little water into the trachea is seldom followed by any serious consequences. Milk and beef-tea are more dangerous; they hang about the air-tubes, are difficult to get rid of, and are very prone to undergo rapid decomposition, and occasion the much-dreaded swallowing pneumonia (*Schluck-pneumonie*). If the experiment is successful, other liquids may be tried, and the problem of feeding is really overcome. But if there is any difficulty, the patient, as long as may be necessary, should be fed through a tube. No instrument is so good for this purpose as a black bulbous catheter, about No. 9 or 10, attached to a long piece of India-rubber tubing, to the other end of which a small glass funnel is fixed.

The throat is first sprayed with a 3 or 4 per cent. solution of cocaine; the tubing is clamped with forceps just above the attachment of the catheter, and the funnel and tubing are filled down to the clamp forceps with warm food. The catheter is very gently passed down the pharynx, and hitches at the posterior border of the larynx. The patient is directed to swallow, and as he does so the catheter is easily passed on into the œsophagus. For the moment discomfort is created, and the patient often struggles. He is directed to close his mouth, and no attempt is made to pass the catheter farther down for half a minute or longer. Then it is slowly and gently passed down to a distance of about eleven inches from the teeth. When the annoyance of the presence of the catheter has ceased, the clamp is removed and the food is allowed to run slowly down into the stomach. If there is an inclination to regurgitation or to cough, the descent of liquid is instantly arrested by pressing on the tubing with the finger and thumb, and the nurse lowers the funnel until the dangerous moment has passed. By attention to these details, a pint or a pint and a half of liquid may easily be introduced into the

stomach without danger. Before removing the catheter the funnel is raised high up, so as to get rid of the contents of the tube; and during the actual removal of the catheter the tubing is kept tightly pressed between the finger and thumb in order to prevent the entrance of even a few drops into the larynx. Patients are often so satisfied with this method of feeding that they have sometimes insisted on being fed through a tube for a much longer period than was really necessary.

Results.—The reporter has removed at least half the tongue in forty-six consecutive cases, with one fatal result. The great majority of the operations were, of course, uncomplicated,—that is, they were not complicated by the removal of lymphatic glands or of ligature of the lingual artery. But they were performed on persons varying in age from thirty-three to seventy-five years, and nineteen of them were performed on patients over sixty years of age. Some of the patients were suffering from organic disease of internal organs, and some of the operations were very severe. They may be thus classified:

(1) Uncomplicated operations, 30; removal of one lateral half of the tongue, 13; removal of anterior half or two-thirds, 12 (in several of these the floor of the mouth was at the same time freely dealt with); removal of the whole tongue, 5.

These uncomplicated operations were recovered from in almost every instance without any drawback.

One patient, forty-six years old, had an attack of secondary hæmorrhage from the right lingual artery eleven days after the removal of the whole tongue. An anæsthetic was administered and the artery tied in the floor of the mouth, after which he made a steady recovery.

In an old man, aged seventy-two, severe bleeding took place on the day of the operation, not from the tongue, but apparently from the back of the throat. After some time the hæmorrhage ceased, and he slowly recovered, but his recovery was seriously retarded by the loss of blood.

(2) Complicated operations, 16: removal of half of the tongue

and lymphatic glands, 2; removal of the whole of the tongue and lymphatic glands, 1; removal of half of the tongue, ligature of the lingual artery in the neck, removal of glands, etc., 10; removal of the whole tongue, ligature of the lingual artery in the neck, etc., 3.

These complicated operations were for the most part recovered from with greater difficulty than the uncomplicated operations. Infiltration took place from the wound in the mouth into the deeper wound in several of them, and in one case in which this occurred the patient was for two or three weeks seriously ill. Since then Butlin has almost invariably drained the lower wound for the first few days after the operation, a precaution which he had seldom previously taken.

In one of these patients, fifty-one years old, hæmorrhage occurred six days after the operation from a deep cavity which had been made in the floor of the mouth, and recurred during three or four days. It was ultimately arrested by thoroughly clearing out the wound to the bottom and plugging it with iodoform gauze. And in a man, aged forty-nine, secondary hæmorrhage set in from the wound in the neck nine days after the operation. The hæmorrhage was arrested also by plugging, and the patient slowly recovered.

The fatal case was that of a man, aged seventy-one, who suffered from an epithelioma of the anterior portion of the left half of the tongue, and associated enlarged glands. Butlin removed the left half of the tongue, the enlarged glands, and tied the lingual artery in the neck. In the course of a day or two the wound in the neck was foul, apparently from the sinking down of discharges into it from the mouth; it had not been drained. The patient had rigors and high temperature. He appeared to improve for a while after the condition of the wound had been bettered, but he finally died five weeks after the operation.—*British Medical Journal*, April 14, 1894.

ABDOMEN.

I. Analysis of Seventy-Eight Cases of Operative Interference with the Gall-Bladder and Bile-Ducts. By A. W.